

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1-5 are pending; Claims 1, 3, and 5 are presently amended.

In the outstanding Office Action, the Abstract of the Disclosure was objected to. The specification was objected to for failing to comply with 35 U.S.C. § 112, first paragraph. Claims 3 and 5 were objected to due to informalities. Claims 1-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Castle (U.S. Pat. No. 5,429,594) in view of Sakai et al ("Physical Properties of Hemoglobin Vesicles as Red Cell Substitutes" in *Biotechnol. Prog.* 1996, 12, 119-125). Claims 4-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Castle and Sakai et al in view of Bitensky (U.S. Pat. No. 5,476,764).

Firstly, Applicants acknowledge with appreciation the courtesy of Examiner Bianco to conduct an interview for this case on August 23, 2004. During the interview, the issues identified in the outstanding Office Action were discussed as substantially summarized herein. Specifically, changes to the abstract and specification were discussed and agreed to. Further, changes to Claims 3 and 5 were discussed to overcome the 35 U.S.C. § 112, sixth paragraph, rejection.

As noted on the Interview Summary Sheet, changes to Claim 1 were discussed to distinguish that the hemoglobin vesicle is modified (e.g., separated, irradiated, and regenerated) after it is withdrawn from the blood supply. Accordingly, as presently amended, Claim 1 defines a method of regenerating a lowered oxygen binding ability of a hemoglobin-vesicle suspension used for injection as an oxygen infusion into a blood supply. The method includes using, as the hemoglobin-vesicle suspension, a phospholipid vesicle which includes the aqueous hemoglobin solution therein and an electron donor in an inner aqueous phase thereof. The method includes irradiating the hemoglobin-vesicle suspension, upon

withdrawal and separation of the hemoglobin-vesicle suspension from the blood supply, with light when hemoglobin in the hemoglobin-vesicle suspension is oxidized into methemoglobin and lose its oxygen binding ability, thereby reducing methemoglobin into hemoglobin to regenerate the oxygen binding ability.

Applicants' representative pointed out that there were no teachings in Castle or Sakai et al for separating the hemoglobin-vesicle suspension from the blood supply. Rather, in Castle, applied for its teaching of withdrawing and irradiating withdrawn blood,¹ all components of the withdrawn blood were jointly irradiated, without any separation of the hemoglobin-vesicle suspensions from the blood supply.

As such, Claim 1 and the claims dependent therefrom are believed to patentably define over the applied prior art.

Furthermore, given the understanding reached during the interview regarding the objection to the specification, the objection to the claims, and the 35 U.S.C. § 112, sixth paragraph, rejection, it is respectfully submitted that these issues have been overcome by the present amendment.

¹ Office Action, page 7, lines 5-8.

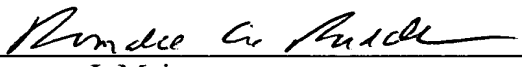
Consequently, in view of the foregoing discussion and present amendments, it is respectfully submitted that this application is in condition for allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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